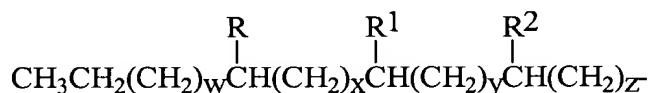


within the range of the position 2 carbon, counting from position 1 carbon (#1) which is attached to the - X - B moiety, to the position of the terminal carbon minus 2 carbons, (the (ω - 2) carbon); and (4) when more than one of these compounds is present, the average total number of carbon atoms in the A^b -X moieties in the above formula is within the range of greater than 11 to 20;

(II) B is a hydrophilic moiety selected from sulfates, sulfonates, amine oxides, polyoxyalkylene, preferably polyoxyethylene and polyoxy-propylene, alkoxyated sulfates, polyhydroxy moieties, phosphate esters, glycerol sulfonates, polygluconates, polyphosphate esters, phosphonates, sulfosuccinates, sulfosuccinates, polyalkoxylated carboxylates, glucamides, taurinates, sarcosinates, glycinate, isethionates, dialkanolamides, monoalkanolamides, monoalkanolamide sulfates, diglycolamides, diglycolamide sulfates, glycerol esters, glycerol ester sulfates, glycerol ethers, glycerol ether sulfates, polyglycerol ethers, polyglycerol ether sulfates, sorbitan esters, polyalkoxylated sorbitan esters, ammonioalkanesulfonates, amidopropyl betaines, alkylated quats, alkylated/polyhydroxyalkylated quats, alkylated quats, alkylated/polyhydroxylated oxypropyl quats, imidazolines, 2-yl-succinates, sulfonated alkyl esters, and sulfonated fatty acids; and

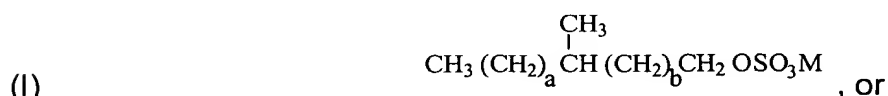
(III) X is selected from $-\text{CH}_2-$ and $-\text{C}(\text{O})-$.

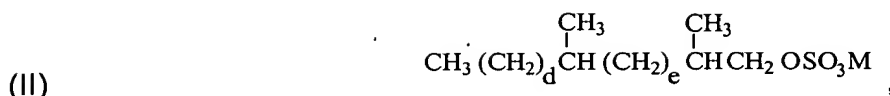
2. A detergent composition according to claim 1 wherein said mid-chain branched anionic surfactant is of the above formula wherein the A^b moiety is a branched primary alkyl moiety having the formula:



wherein the total number of carbon atoms in the branched primary alkyl moiety of this formula, including the R, R^1 , and R^3 branching, is from 13 to 19; R, R^1 , and R^2 are each independently selected from hydrogen and C_1 - C_3 alkyl, provided R, R^1 , and R^2 are not all hydrogen and, when z is 0, at least R or R^1 is not hydrogen; w is an integer from 0 to 13; x is an integer from 0 to 13; y is an integer from 0 to 13; z is an integer from 0 to 13; and $w + x + y + z$ is from 7 to 13.

3. A detergent composition according to claim 2 wherein said mid-chain branched anionic surfactant has the formula:





or mixtures thereof; wherein M represents one or more cations; a, b, d, and e are integers, a+b is from 10 to 16, d+e is from 8 to 14 and wherein further

when a + b = 10, a is an integer from 2 to 9 and b is an integer from 1 to 8;

when a + b = 11, a is an integer from 2 to 10 and b is an integer from 1 to 9;

when a + b = 12, a is an integer from 2 to 11 and b is an integer from 1 to 10;

when a + b = 13, a is an integer from 2 to 12 and b is an integer from 1 to 11;

when a + b = 14, a is an integer from 2 to 13 and b is an integer from 1 to 12;

when a + b = 15, a is an integer from 2 to 14 and b is an integer from 1 to 13;

when a + b = 16, a is an integer from 2 to 15 and b is an integer from 1 to 14;

when d + e = 8, d is an integer from 2 to 7 and e is an integer from 1 to 6;

when d + e = 9, d is an integer from 2 to 8 and e is an integer from 1 to 7;

when d + e = 10, d is an integer from 2 to 9 and e is an integer from 1 to 8;

when d + e = 11, d is an integer from 2 to 10 and e is an integer from 1 to 9;

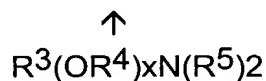
when d + e = 12, d is an integer from 2 to 11 and e is an integer from 1 to 10;

when d + e = 13, d is an integer from 2 to 12 and e is an integer from 1 to 11;

when d + e = 14, d is an integer from 2 to 13 and e is an integer from 1 to 12;

whereby, when more than one of these sulfate surfactants is present in the surfactant system, the average total number of carbon atoms in the branched primary alkyl moieties is from 11 to 20.

- a1
4. A detergent composition according to claim 3 wherein said mid-chain branched anionic surfactant has an A^b - X moiety comprising from 11 to 20 carbon atoms and B is a sulfate group.
 5. A detergent composition according to claim 4 wherein said amine oxide surfactant is of the formula



wherein R³ is an alkyl, hydroxyalkyl, or alkyl phenyl group or mixtures thereof containing from about 8 to about 22 carbon atoms; R⁴ is an alkylene or hydroxyalkylene group containing from about 2 to about 3 carbon atoms or mixtures thereof; x is from 0 to about 3; and each R⁵ is an alkyl or hydroxyalkyl group containing from about 1 to about 3 carbon atoms or a polyethylene oxide group containing from about 1 to about 3 ethylene oxide groups. The R⁵ groups can be attached to each other, e.g., through an oxygen or nitrogen atom, to form a ring structure.

6. A detergent composition according to claim 5 wherein said amine oxide surfactant is selected from C₁₀-C₁₈ alkyl dimethyl amine oxides; C₈-C₁₂ alkoxy ethyl dihydroxy ethyl amine oxides and/or mixtures thereof.
7. A detergent composition according to claim 6 wherein said amine oxide surfactant is comprised at a level of from 0.2% to 15% by weight of total composition.
8. A detergent composition according to claim 7 wherein said mid-chain branched anionic surfactant is comprised at a level of from 0.1% to 50% by weight of the total composition.
9. A detergent composition according to claim 7 wherein said pectate lyase is present at a level of from 0.0001% to 2% pure enzyme by weight of total composition.
10. A detergent composition according to claim 1 of the present invention further comprising a pectin lyase enzyme.
11. A method of cleaning a fabric, a dishware or hard surface with a detergent composition according to claim 1, for superior cleaning performance.
-